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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,090	04/15/2004	T. Douglas Mast	END5314USNP	7162
27805	7590	01/12/2009		
THOMPSON HINE L.L.P. Intellectual Property Group P.O. BOX 8801 DAYTON, OH 45401-8801				
EXAMINER				
KISH, JAMES M				
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3737				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/825,090

**Applicant(s)**

MAST ET AL.

**Examiner**

JAMES KISH

**Art Unit**

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 5-17 and 23-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850/8)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 8/27/08, 10/07/08, 10/29/08, 1/2/09



## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed November 3, 2008 have been fully considered but they are not persuasive.

The Applicant argues that "the Examiner has the burden of finding prior art in a 102 rejection which explicitly teaches the transducer being operated in the manner specified in applicant's claim 1 and not prior art which is silent on how the transducer is operated when applicant, in the prior art section of his specification, has disclosed the prior art operation of the transducer."

The Examiner notes that the Applicant is arguing "the transducer being operated in the manner specified in applicant's claim." The Applicant's claims are system claims. Section 2114 of the MPEP states (with emphasis in the original), "Apparatus claims cover what a device *is*, not what a device *does*." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990)." Section 2113 of the MPEP states, "A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)." Section 2114 of the MPEP states, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997)."

Furthermore, the argument that the "prior art which is silent on how the transducer is operated when applicant, in the prior art section of his specification, has disclosed the prior art operation of the transducer," is moot because the claims are the determining factor for patentability.

Also, the Applicant argues that "it is not enough for the Examiner to say in a 102 rejection that a controller could be programmed to operate the single physically rotatable transducer of Hadjicostis as specified in the Applicant's claim 1." The Examiner notes that there is no disclosure in the any of the claims that stating that the controller is a programmable medium, nor that the controller is programmed.

Regarding the Applicant's note that "as well as other sequences" should not have been in quotations, the Examiner agrees. The phrase should have been outside of the quotations.

With respect to the currently pending, non-withdrawn claims, claims 1 and 18 are the only claims that actually limit the structure of the systems. Claim 2 discusses a next-in-time interval's angular position, which is functional. Claim 3 discusses the length of the time intervals and angular positions with respect to other time intervals and angular positions. Claim 4 discusses a specific sequence of angular positions that the device is intended to perform. Therefore, claims 2-4 are intended use claims and recite functional language that does not further limit the structure.

Claim 19 discusses that the transducer continuously rotates and is therefore functional language. Claims 20-22 discuss how far the transducer is intended to rotate

and is therefore intended use and represents functional language, therefore, not further limiting the structure of the apparatus.

For at least the reasons above, the rejection of the claims still stands and is repeated below.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Hadjicostis et al (US Patent App. No. 2004/0254570).

"The system **320** of Hadjicostis includes a distal end portion **70a** which houses transducer device **390**. Rotating connector rod **392** carries transducer device **390** and is coupled to motor **394**. Further, the motor **394** exerts a force utilized to rotate connecting rod **392** which in turn rotates transducer device **390** (see paragraph 54). It should be appreciated that in other embodiments, more than one piezoelectric element of the same or different types could be included (see paragraph 55). Generally referring to **FIGS. 1-11**, the embodiments of system **20**, **220**, and **320** can be completely or partially combined in other embodiments (see paragraph 56)." Based on the above,

citations, Hadjicostis discloses the aspects of the system claimed in the current application. See below where the rejection from the Office Action dated August 6, 2008 points out the specific aspects of Hadjicostis that are applicable to the pending claims.

Claims 2-4 are intended use claims and recite functional language that does not further limit the structure. Claim 2 discusses a next-in-time interval's angular position, which is functional. Claim 3 discusses the length of the time intervals and angular positions with respect to other time intervals and angular positions. Claim 4 discusses a specific sequence of angular positions that the device is intended to perform.

Claims 19-22 are intended use claims and recite functional language that does not further limit the structure. Claim 19 discusses that the transducer continuously rotates and is therefore functional language. Claims 20-22 discuss how far the transducer is intended to rotate and is therefore intended use and represents functional language, therefore, not further limiting the structure of the apparatus.

Hadjicostis is capable of providing the functions of claims 2-4 and 19-22.

The following paragraphs are the rejection from the Office Action dated August 6, 2008, which points out the relevant aspects of Hadjicostis.

Hadjicostis discloses an endoscope having a proximal end and a distal end. Located at the distal end portion are one or more piezoelectric elements operable to ablate tissue of an internal body region (*see* Abstract). Regarding the piezoelectric

elements, see Figures 3, 4 and 8-10. The term “transducer” is used in Hadjicostis to describe **90** in Figure 2 (last sentence of paragraph 34), as well as elements **102** in Figure 3 (see paragraph 36). In one mode of ablation operation, different subsets of elements **102** are activated in a selected sequence in accordance with operating logic (i.e., controller) of subsystem **40**. A sweep sequence can be performed that can continue for 360°. Alternatively, the sweep can be less than 360° (paragraph 42). The subsets [can] change in sequence one element at a time at uniform time intervals (paragraph 43). Subsets may be sequenced in a pattern that lacks rotational progression, subsets may be constituted of nonconsecutive elements, as well as other sequences (paragraph 46). Regarding claims 18-22 (and a first interpretation of claim 1 – see below), another embodiment provides a rotating connector rod that carries a transducer device and is coupled to a motor. The transducer is fixed to the rod. The motor exerts a force utilized to rotate connecting rod which in turn rotates the transducer device (paragraph 54). The motor and rotation rod embodiment can operate in the same fashion as that of the first described embodiment (see paragraphs 54 and 55). Therefore, rotation may occur at a uniform time interval, may sweep up to or less than 360°, etc.

Regarding “a controller which rotationally controls the medical treatment transducer to emit ultrasound to thermally ablate patient tissue...” as written in claim 1, the Examiner may interpret this to read as (First Interpretation) the transducer physically rotating, which is described by the embodiment mentioned above in paragraph 54 as related to claims 18-22. However, this may also be interpreted as (Second



Interpretation) a controller which controls the emission of a transducer to emit in a rotational manner. This second interpretation does not require physical rotation of the transducer. The term "transducer" is used in Hadjicostis to describe item **90** in Figure 2 (last sentence of paragraph 34). Therefore, it can be interpreted that transducer **90** is controlled to provide ultrasonic emission in a rotational manner. Based on this argument, both interpretations are anticipated by Hadjicostis.

Regarding claim 4, "subsets may be sequenced in a pattern that lacks rotational progression; subsets may be constituted of nonconsecutive elements, as well as other sequences (paragraph 46)." Therefore, Hadjicostis is capable of performing these angular positions.

Regarding claim 21, the reference teaches that the device is capable of providing at least 360° of rotational ablation. Therefore, when the device is used twice simultaneously, it will provide multiple rotations at most equal to multiples of 360°.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES KISH whose telephone number is (571)272-5554. The examiner can normally be reached on 8:30 - 5:00 ~ Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ruth S. Smith/  
Primary Examiner, Art Unit 3737

JMK